CLAIM AMENDMENTS

- (Amended) Apparatus for the detection of microbes on a non-living surface or in air or liquid comprising:
 - a. means for directing <u>discrete regions of</u> electromagnetic radiation towards <u>a the</u> sample, said means adapted to emit radiation energies capable of exciting <u>more than at</u> least one intrinsic microbial fluorophore;
 - b. multiple detectors at least one detector for electromagnetic radiation capable of converting the emitted, reflected and scattered or reflected/scattered radiation resultant from the fluorescence of said microbial fluorophores into electrical signals, said detectors detector adapted by means of optical filters to detect electromagnetic radiation at wavelengths above 320 nm to separately detect and thus distinguish between the minima and maxima associated with the fluorescence emission of said microbial fluorophores; fluorophores, the reflected excitation electromagnetic energies, the electromagnetic energies scattered by the sample, and the electromagnetic energies resultant from the background; and
 - c. means for analyzing the electrical signals corresponding to the fluorescence of the intrinsic microbial fluorophores, and the reflected/scattered excitation energies to determine the presence of microbes.
- 2. (Withdrawn) The method as defined in Claim 1 wherein the electromagnetic waves are directed towards the microbes in time-modulated pulses.
- 3. (Withdrawn) The apparatus defined in Claim 1 wherein the means for directing electromagnetic radiation includes means for time-modulating the electromagnetic radiation.

Should the Examiner have any questions, he is requested to call Applicants' undersigned attorney collect at (801) 521-3200.

Respectfully submitted,

K. S. Cornaby

Attorney for Applicants

Jones Waldo Holbrook & McDonough PC

170 South Main Street, Suite 1500

Salt Lake City, UT 84101

(801) 521-3200

4



CERTIFICATE OF MAILING

I certify that the attached Amendment and a Substitute Declaration For a Utility Patent Application is being deposited with the United States Postal Service as Express Mail EM 105867890 US in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the 30th day of July, 2007.

Roberta M. Kelly

404910_1 - 4 -